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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/596,261

06/16/2006

Anders Stokki

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4585

23526 7590 12/14/2007
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EXAMINER

NGUYEN, KHANH TUAN

ART UNIT	PAPER NUMBER
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1796

MAIL DATE	DELIVERY MODE
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12/14/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/596,261	Applicant(s) STOKKI ET AL.	
	Examiner Khanh T. Nguyen	Art Unit 1796	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 October 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 12-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 12-24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. The amendment filed on 10/04/2007 is entered and acknowledged by the Examiner. Claims 12-22 and newly added claims 23-34 are currently pending in the instant application. Claims 1-11 have been cancelled.
2. The correction to the typographical error in the specification is acknowledged by the Examiner. The objection of claim 19 for typographical error is withdrawn in light of Applicant's amendment. The rejection of claim 16 under 35 U.S.C 112, second paragraph, is withdrawn in light of Applicant's amendment. The rejection of claims 12-18 under 102 (b) and 102 (e) over the prior art of record is moot in view of the new ground(s) of rejection. The rejection of claims 13-14 and 18-22 under 103 (a) over the prior art of record is moot in view of the new ground(s) of rejection.

Claim Objections

3. Claim 21 is objected to because of the following informalities: Claim 21 is missing a period at the end of the sentence. Appropriate correction is required.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 12-13, 15-18, and 23-24 are rejected under 35 U.S.C. 102(b) as being anticipated by Hari et al. (U.S Pat. 5,516,546 hereinafter, "Hari").

With respect to claims 12 and 15, Hari teaches a conductive floor coating comprising of a substrate (3, 4, and non-label strip) and a conductive top coating 5 (Fig. 3). Hari further teaches a conductive floor coating comprising of amorphous or spheroidal graphite and and/or carbon fiber and/or finely divided metal particles preferably having a particle size ranging from 20-1000 μm (microns) (Abstract). Hari also teaches the conductive filler particles is presented in an amount of 10-40% weight of amorphous or spheroidal graphite or 5-30% weight of carbon fiber or 1-10% weight finely divided metal particles (Col. 2, line 63 to Col. 3, line 8). Hari teaches a floor covering comprising of the same ingredients within the same proportion for the same utility, thus the particle in said floor covering is expected to have the same dry bulk resistivity as claimed. Please note that structurally similar compounds (i.e. particles) are generally expected to have similar properties (i.e. dry bulk resistivity). In re Gvurik, 596 F. 2d 1012, 201 USPQ 552. Moreover, the amount of conductive filler is considered to be the dry content in coating composition, thus the amount of conductive filler presented in the coating reads on the claimed limitation of the coating comprises a water base UV-cured PU-acrylate dispersion with a dry content of between 5% and 80% w/w, more specific 20-60% w/w.

The reference specifically or inherently meets each of the claimed limitations.

The reference is anticipatory.

Regarding claim 13, Hari teaches a spheroidal, powder, or granule particle (Col. 2, line 63 to Col. 3, line 8).

Regarding claims 16, 17, and 23, Hari teaches a polyurethane and methacrylate resin (i.e. an epoxy acrylate) (Col. 2, lines 9-13 and Col. 3, lines 39-50).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 14 and 22 are rejected 35 U.S.C. 103(a) as being unpatentable over Hari et al. (U.S Pat. 5,516,546).

Hari teaches the conductive filler particles such as carbon black, graphite or surface-treated metal powder may be added into the coating to achieve conductivity (Col. 2, lines 11-13). Hari failed to teach the metal powder having a treated (i.e. coated) with Ag, Al, Cu, Ni, Au, or an alloy thereof on its surface.

Nevertheless, the reference is deemed to teach the claimed flooring covering because such a core-shell type particle comprising of a core particle such as carbonaceous or metallic coated with a metal or metal alloy shell is known in the art.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention having the motivation to optimize the floor covering composition of Hari to arrive at the claimed invention by incorporating a particle that have a metal or metal alloy surface-treatment in order to achieve a desired conductivity as suggested by Hari.

8. Claims 19-21 are rejected 35 U.S.C. 103(a) as being unpatentable over Hari et al. (U.S Pat. 5,516,546) as applied to the claims above, and further in view of Wienand et al. (U.S Pat. 4,101,689 hereinafter, "Wienand").

Hari is relied upon as set forth above. With respect to instant claims 19-21, Hari does not disclose the thickness of the top coating within the claimed thickness, the substrate is a conductive and antistatic, and the substrate is a PVC, polyolefin, or rubber based flooring with vertical conductive channels.

In the same field of endeavor, Wienand teaches an antistatic and/or electrically conductive floor covering having a conductive top layer of a few tenths of a millimeter (Col. 3, lines 63-65). Wienand further teaches a substrate 8 is polyvinyl chloride resin (PVC) having vertical holes 1 filled with conductive paste to product vertical conductive channels (Fig. 1-4).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the floor covering structure of Hari by applying a the top conductive layer within a few tenths of a millimeter over a PVC substrate having vertical holes to product conductive channels as suggested by Wienand in order to dissipate the electrical charge from the top coating to the lower surface.

9. Claims 12, 13, 15, 16, 17, 20 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Heckel et al. (U.S Pat. 4,670,075 hereinafter, "Heckel") or Szerreiks et al. (U.S Pat. 6,831,023 hereinafter, "Szerreiks") in view of Kojimoto (Machine English Translated JP Pub. 58-042670 hereinafter, "Kojimoto").

With respect to claims 12, 13, 15, 16, 17, 20 and 23, Heckel teaches an electrically-conductive floor covering comprising a bottom layer (i.e. substrate) and a top layer containing not more than about 0.5% weight of carbon black or graphite (i.e. particles) (Col. 1, lines 9-17). Heckel also teaches adding additional metal powders to increase conductivity of the coating (Col. 1, lines 45-46). Heckel stated, "The upper of the two layers has an electrically-non-conductive composition with embedded electrically conductive particles whose composition is otherwise the same. The particles make contact with one another and with the electrically-conductive lower layer through which electrical charges reaching the surface of the finished floor covering are dissipated." (Col. 1, lines 24-30).

Similarly, Szerreiks teaches a floor covering 1 comprising a under (lower) layer 3 (i.e. substrate) and a top coating 2 (Fig. 1). The top coating (wear layer) may comprise of 0.1-5% weight carbon black and/or 0.1-3% weight metal powder (Col. 4, lines 10-13).

However, neither Heckel nor Szerreiks suggests the particles with a conductive coating having a mean size between 0.1 and 50 microns (μm).

In the same field of endeavor, Kojimoto teaches an electrically conductive floor covering comprising of curing resin such as epoxy resin, polyurethane resin, unsaturated polyester resin or a modified product thereof and graphite having a peak of particle size distribution is within the range of 150-5 mesh (Abstract). It is well known in the art that a mesh opening is measured in micron units, thus the disclosure of 5-150 mesh is equivalence to 5-150 micron. Furthermore, the peak of particle size distribution is considered to be the mean particle size. Therefore, Kojimoto disclosure teaches the graphite particle in a conductive floor coating having a mean size between 5 and 150 microns (μm). A change in size is generally recognized as being within the level of ordinary skill in the art, see *In re Rose*, 105 USPQ 237 (CCPA 1955).

A *prime facie* case of obviousness exists because the claimed ranges "overlap or lie inside ranges disclosed by the prior art", see *In re Wertheim*, 541 F.2d 257, 191 USPQ 90 (CCPA 1976; *In re Woodruff* 919 F.2d 1575, 16USPQZd 1934 (Fed. Cir. 1990). See MPEP 213 1.03 and MPEP 2144.051.

The subject matter as a whole would have been obvious to one having ordinary skill in the art at the time the invention was made to select the mean particle size portion of the prior art's range which is within the range of applicant's claims (0.1-50 micron)

because it has been held to be obvious to select a value in a known range (5-150 micron) by optimization for the best results, see *In re Aller, et al.*, 105 USPQ 233.

Response to Arguments

10. Applicant argues that the subject application was filed on June 8, 2006, such that the filing date indicated on the Office Action is incorrect. The Examiner respectfully disagrees with the Applicant's argument.

According to the M903, the filing date is June 16, 2006. In addition, PCT Legal granted a petition ^{which} states the date is also June 16, 2006. Thus, the filing date of the instant application is June 16, 2006 and not June 08, 2006. In the event that the Applicant believe the subject application requires another filing date, he or she will need to petition for a corrected filing date.

Applicant's arguments filed on 10/04/2007 have been fully considered but are moot in view of the new ground(s) of rejection set forth above.

Conclusion

11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within

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TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Khanh T. Nguyen whose telephone number is (571) 272-8082. The examiner can normally be reached on Monday-Friday 8:00-5:00 EST PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Randy Gulakowski can be reached on (571) 272-1302. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

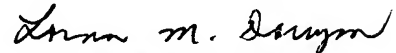
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KTN
11/29/2007


LORNA M. DOUYON
PRIMARY EXAMINER